Personal GPS Tracker

USERS MANUAL

V6.4

1 Product Overview

This tracker shows you with your mobile phone or PC the location of your targets via SMS or GPRS

TRACKER has the following features

- *Tracking via SMS or GPRS*
- *Current location report*
- *Tracking by time interval*
- *Two-way conversation*
- *SOS alert*
- *Geo-fencing control*
- *Low battery alert*
- *Over speed alert*
- *Four buttons for making phone call and/or sending message to reset numbers*
- *Removable and rechargeable internal battery*
- *Built-in speaker and microphone*
- *Alert when Track enter/exits GPS blind area*
- *Live Voice monitoring*
- *Vibrating alert*
- *Without drift*
- *Vehicle safeguard*

2 For Your Safety

Read these simple guidelines. Not following them may be dangerous or illegal. Read the full user manual for more information.

Switch on safely*- Do not switch on* Track *when wireless phone use is prohibited or when it may cause interference or danger.*

Switch off in Hospitals *– Follow any restrictions. Switch* Track *off near medical equipment.*

Switch off in Aircraft –Follow any restrictions. Wireless devices can cause interference in aircraft.

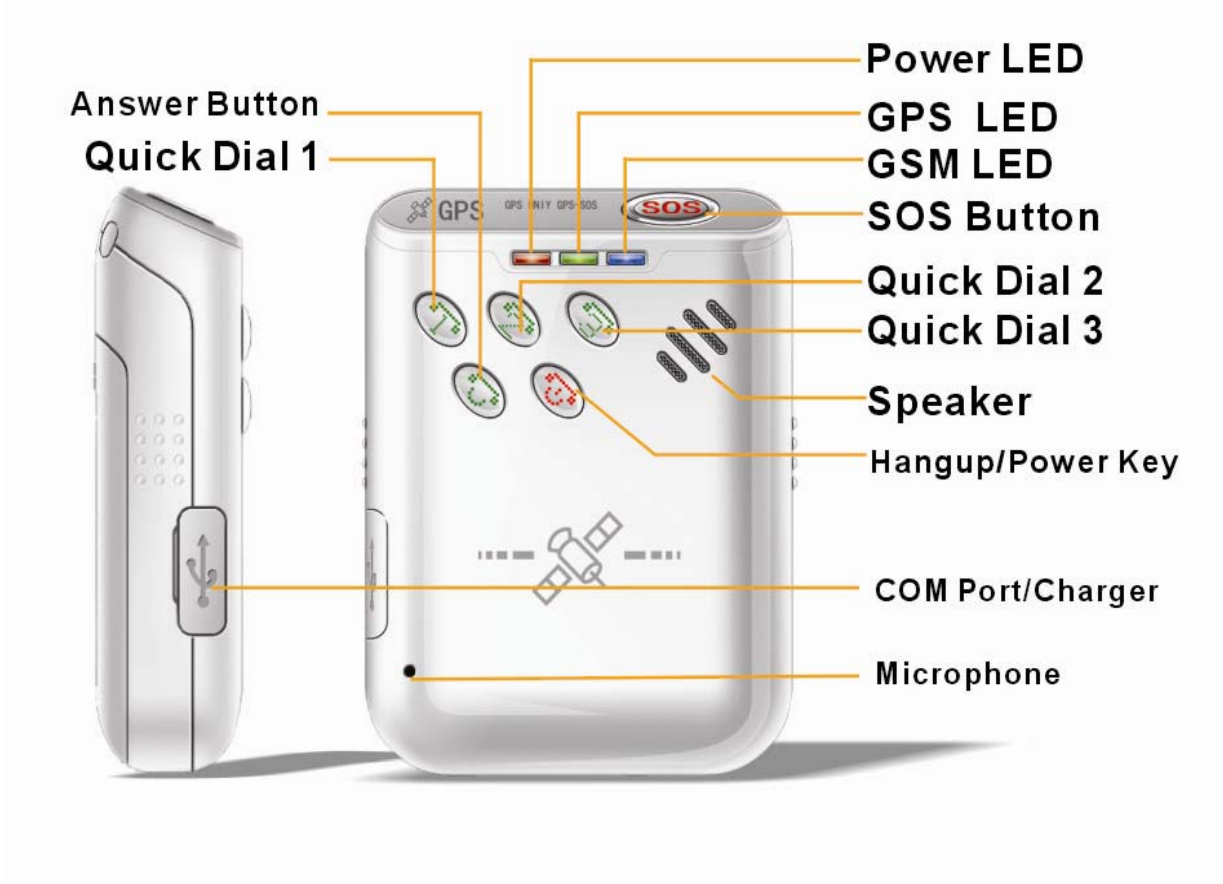
Switch off when refueling *– Do not use* Track *when at a refueling point. Do not use near fuels or* chemicals.

Water Resistance *–Track is not water resistant. Keep it dry. Use waterproof bag if necessary.*

3 Track Parameters& Panel Description

Item	**Specification**
Charging Voltage	DC 5V/500mA (Micro USB port)
Internal Battery	Rechargeable and removable 830 mAh battery (3.7V)
Operating temperature	-20° to 55° C
Humidity	5% to 95% Non-condensing
GSM module	GSM 900/1800/1900Mhz
GPS Chipset	latest GPS (AGPS)
GPS Sensitivity	-158Db
GPS Frequency	L1, 1575.42 MHz
C/A Code	1.023 MHz chip rate
Channels	20 channel all-in-view tracking
Position Accuracy	10 meters, 2D RMS
Velocity Accuracy	0.1 m/s
Time Accuracy	1 us synchronized to GPS time
Default datum	WGS-84
Reacquisition	0.1 sec., average
Hot start	1 sec., average
Warm start	38 sec., average
Cold start	42 sec., average
Altitude Limit	18,000 meters (60,000 feet) max.
Velocity Limit	515 meters/second (1000 knots) max.
Acceleration Limit	Less than 4g
Jerk Limit	20 m/sec
Work time	60 hours in sleep mode and 10 hours in normal mode
LED	3 LED indicators showing power, GPS, GSM status and other operation status.
G-Sensor	± 2g

Panel Description



4 Getting Started

4.1 Hardware and Accessories

- USB Power Cable
- User Manual
- Other document or software if required

4.2 Light and Button Functionality++++++

TRACKER has four buttons and three LED lights with three different colors to indicate the status of the unit. All LED is enabled when power on, and short click SOS key to change GSM & GPS LED enable / disable status.

Red LED -- Indicating power status	
Off	Power off / charging complete / working / GPS optional
Flashing (on for 0.05s and off for 4.95 s)	Low power
Flashing (on for 1s and off for 4 s)	GPS on

On	Charging

Green LED -- Indicating GPS status	
Off	Device is not ready
Flashing (on for 0.05 s and off for 4.95 s)	GPS fix
Flashing (on for 1 s and off for 4 s)	GPS no fix / GPS power off

Blue LED –Indicating GSM status	
On	Telephone dial/Have a call/Busy/ GPRS transmit
Flashing (on for 0.05 s and off for 4.95 s)	TRACKER is connected to GSM network
Flashing (on for 1 s and off for 4 s)	TRACKER is not connected to the GSM network

Note: When it is power on, but not finding SIM card or showing errors on SIM card, the three LEDs will be on and off one by one as a circle repeatedly.

Power Button	**To turn on/off**
SOS Button	Long press SOS button to send an alarm to location center and make a phone call and/or send an SMS to the preset phone number. Short press SOS button to change GSM & GPS LED enable / disable status.
1 Button	Long press 1 button to make a phone call and/or send an SMS to the preset phone number.
2 Button	Long press 2 button to make a phone call and/or send an SMS to the preset phone number.
3 Button	Long press 3 button to make a phone call and/or send an SMS to the preset phone number.

4.3 First Use

Ensure that Tracker has a working SIM installed

- Check that the SIM has not run out of credit
- Check that the SIM Lock code is turned off

Use some other mobile phone to confirm that the PIN code Can not been set ,and that it can dial out and receive telephone calls, and that it can connect to internet by GPRS.

◆ Charge the battery for at least 3 hours in power-off status using the wall charger or car charger. Red light is on during charging and is off when charging is completed.

4.4 Operation Instructions

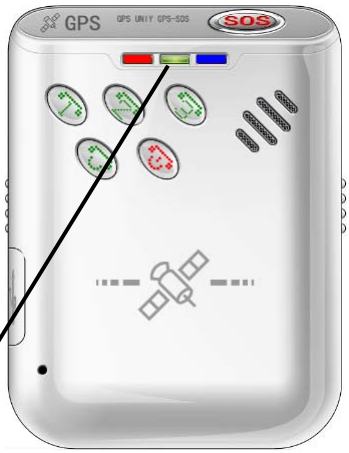
(1) Power On/Off

➢ Power On:

Step 1. When it is off, press the **power button** for 5 second to switch on the power.

Step 2. After power on, **GSM LED** will light on first (on 1 second and off 4 seconds for searching GSM network, or on 0.05 second and off 4.95 seconds after get GSM network).

Step 3. Some 10 seconds later, **GPS LED** starts to flash (on 1 second and off 4 seconds for searching GPS, or on 0.05 second and off 4.95 second after GPS fixed). By then, the device is ready to work.



Note: When it is power on, but not finding SIM card or showing errors on SIM card, the three LEDs will be on and off one by one as a circle repeatedly.

➢ Power Off:

When it is on, press the power button for 3 seconds to switch off the power; Power/GPS/GSM LED will shut off right now. By then, the device is turned off.

(2) SOS Emergency Help Function

When SOS button is long pressed, Track will send alarm to location center, and send a SMS message and make phone call for emergency help. The phone number can be set by the users.

When 1 2 3 button is long pressed, Track will make normal phone call. The phone number can be set by users. The phone number list can be set by SMS command.

(3) Conversation Function

Call In: One can make phone call to Track by simply dialing the SIM card number.

To receive the incoming phone call

To refuse the incoming phone call

Call Out: Track has four speed dial; you can long press preset 4 sets of phone

(4) Connect to www.imecare.com

TRACKER will connect to www.imecare.com automatically per 5 mins to report its position info and fetch the new configuration. Ensure that Track has been registered on the www.imecare.com .

Step1. Register your Track device on www.imecare.com to get username and password. The device IMEI number is required. The IMEI number is printed on the back of Track.

Step2. Check preset APNs list (Appendix 2)

If your GSM operator's APN is not in this list, please set APN by SMS (Preference 5.2.1)

Step3. When APN is set, Track will connect to www.imecare.com automatically per 5 mins to report its pos info to center. You can login www.imecare.com web sit to trace the Track.

5 SMS Command

TRACKER will only accept commands from a user with the correct password.

Commands with wrong password are ignored. **The default password is 000000.**

5.1 Basic SMS Commands

5.1.1 Return the location of the tracker

Description: To know the location of your Track, send an SMS to Track and it will report its location by SMS.

Command: W<password>, <000>

Notes: The default password is 000000.

Example:

SMS sent: W000000, 000

SMS received:

W00,000,$GPRMC,034522,662,A,2232,3126,N,11359,3061,E,000.0,000.0,241209,,,A*6E

5.1.2 SOS/Call 1/Call 2/Call 3

Description: To authorize a mobile phone number for the SOS, 1, 2 or 3 buttons. When the button is pressed, a message will be sent and/or simultaneously a call will be made to the authorized number.

Command: W<password>,003,F,P, <telephone number>

Notes:

(a) F =0, cancel this function
=1, set send SMS to the preset number
=2, set call the preset number
=3, set send SMS and also Call the preset number
P =1, set a authorized number for SOS button
=2, set a authorized number for 1 button
=3, set a authorized number for 2 button
=4, set a authorized number for 3 button

(b) When one of the buttons is pressed and a call is made, you can call and talk with the

tracker-holder.
(c) Press END button to hang up the call or cancel a calling

Example:
SMS sent: W000000,003,3,1,123456789
SMS received: W01,003,Set phone number OK
Meaning: When the SOS button is pressed, Track will send an SMS to telephone number “123456789” and also make a phone call to it.

When a call is coming in, the blue light is on. Press ACCEPT button to receive the incoming call and then talk with the caller. To complete the conversation, hang up the call by pressing END button.

5.2 GPRS Settings by SMS

Tracking via GPRS, you should set APN for Track.

Ensure that your SIM card in Track supports GPRS connection prior to setting.

5.2.1 Set APN

Command: W<Password>,011, <APN>,<APN Name >,<APN Password>,<APN DNS>,<APN Second DNS>
Note: If no APN name, APN password, APN DNS and APN Second DNS required, input APN only.
Example: W000000, 011, CMNET
TRACK will reply with an SMS (like ‘W01, 011, Set device APN OK’) to confirm this setting.

5.3 Car Safeguard Setting

5.3.1 Opening Function

You can start this function via SMS of your cell phone to set the authorized number for SOS button. (You can have more reference from setting SOS phone number in **5.1.2**)

5.3.2 Setting

You can send message “SF” with your cell phone to your reset phone numbers in Tracker to set it. After that, if your vehicle is illegal moved or abnormal vibrated; it will inform you about it via SMS right now.

5.3.3 Cancelling

You can send message “CF” with your cell phone to your reset phone numbers in Tracker to cancel it. After that, the safeguard is closed successfully.

5.3.4 Location

You can send message “DW” with your cell phone to your reset phone numbers in Tracker, then the Tracker will answer the location of your vehicle via SMS.

5.3.5 Orientation-- The latitude and longitude

You can send message “DWJE” with your cell phone to your reset phone numbers in Tracker, then the Tracker will only answer the exact data of the latitude, longitude and the site ID of your vehicle instead of the words description of the location.

6 Command List

Remarks: ****** is user’s password and the default password is 000000.

Description	Command	Remarks
Get current location NMEA format	W******,000	Get current location of Track, NMEA format
Get current location Google Earth format	W******,051	Get current location of Track, Google Earth format
Get current location Plain address	W******,052	Get current location of Track, plain address
Change user’s password	W******,001,######	****** is old password ###### is new password Max 8 characters.
Set preset phone number for SOS button	W******,003,F,P,T	F=0, to turn off this function; F=1, set sending SMS; F=2, set calling preset phone number;

		F=3, set SMS and calling (default) P=1, set a authorized number for SOS button P=2, set a authorized number for 1 button P=3, set a authorized number for 2 button P=4, set a authorized number for 3 button T: Preset phone number. Max. 16 digits

Presetting by SMS for GPRS tracking (Ensure that your SIM card supports GPRS connection prior to setting)		
Set APN	W******,011,APN,APN Name, APN Password, APN DNS,APN Second DNS	If no APN name and password required, just insert APN only; APN defaulted as 'CMNET'; APN + APN name + APN password + APN DNS + APN Second DNS not over 39 characters.
Set phone number for wiretapping	W******,030,T	T is the telephone number for Wire tapping and max. 16 digits
Set character for SOS alert message	W******,033,P,Char	P is the button number. P=1, 2, or 3. P=1, SOS button P=2, 1 button P=3, 2 button P=4, 3 button Char is the character in SOS message and max 32 characters
Restore factory settings	W******,048	Restore factory settings
Get version and serial number	W******,600	To get version and serial number of current firmware
Get IMEI	W******,601	To get IMEI
Set vehicle safeguard	SF	To make it enter security pattern, setting SOS key effective
Cancel vehicle safeguard	CF	To make it closure security pattern, setting SOS key effective
Get Location of vehicle	DW	Get the location of vehicle via SMS, setting SOS key effective
Get the latitude and longitude of vehicle	DWJW	Get the latitude, longitude and the site ID of vehicle, setting SOS key effective

Appendix 1

Format of SMS reply: W,###**

** Reply number
Command number

Reply number:

00: Get location succeed
01: Setting succeed
02: Setting failed
03: Format error
04: Password error
05: Command error
06: Change password error
07: Parameter error
08: No GPS data
09: Protocol not support
10: Over speed
11: Geo-Fence
12: GPS no fix
13: Port open failed
14: Timeout
15: Reject
16: Get GPS data failed
17: Allocate memory failed
18: Automatic alert
19: GPRS login

Appendix 2

Mobile Operator APN preset by Track

China Mobile
China Unicom
Albania, vodafone AL
Argentina, Movistar
Argentina, Personal
Austria, A1
Austria, T-Mobile A
Austria, telering
Australia, Optus
Australia, Telstra Mobile
Australia, 3
Australia, vodafone AU
Azerbaijan, AZE ACELL
Bangladesh, GramenPhone
Belarus, Velcom
Belarus, MTS
Belgium, BASE
Belgium, Mobistar
Belgium, Proximus
Botswana, MASCOM
Brazil, Claro
Brazil, Oi
Brazil, TIM BRASIL
Bulgaria, BG GLOBUL
Bulgaria, M-Tel BG
Cameroon, MTN CAM
Canada, Fido
Canada, ROGERS
Chile, ENTEL
Costa Rica, I.C.E.
Croatia, T-Mobile
Croatia, VIPnet
Czech Republic, T-Mobile CZ

Denmark, TDC MOBIL
Denmark, TELIA DK
Dominican, orange
Egypt, Vodafone EG
Egypt, MobiNiL
Estonia, EE EMT
Finland, DNA
Finland, FI Elisa
Finland, FI SONERA
France, Bouygues FR
France, Orange F
France, SFR FR
Ghana, Areeba
Ghana, Onetouch
Ghana, Tigo
Germany, Vodafone.de
Germany, E-Plus
Germany, O2-de
Germany, T-Mobile D
Greece, COSMOTE GR
Greece, vodafone GR
Hong Kong, CSL
Hong Kong, New World
Hong Kong, SmarToneVodafone
Hong Kong, 3 HK
Hungary, H pannon
Hungary, T-Mobile H
Hungary, vodafone HU
Iceland, Siminn
India, Airtel
India, BPL MOBILE
India, IDEA
India, MTNL
Indonesia, XL
Indonesia, INDOSAT
Indonesia, Telkomsel
Ireland, METEOR IRL
Ireland, O2 IRL
Ireland, vodafone IRL
Israel, Cellcom
Israel, Orange
Italy, TIM IT
Italy, vodafone IT
Italy, WIND IT
Jamaica, Digicel
Kazakhstan, Beeline KZ
Kenya, Safaricom
Latvia, LMT LV
Latvia, TELE2 LV
Lebanon, Alfa
Lithuania, LT BITE GSM
Lithuania, OMNITEL LT
Lithuania, TELE2
Luxembourg, L LUXGSM
Luxembourg, L TANGO
Luxembourg, L VOX
Malaysia, MY CELCOM
Malaysia, DiGi
Malaysia, MY MAXIS
Malta, go mobile
Malta, vodafone MT
Mexico, TELCEL
Moldova, MOLDCELL MD
Morocco, MEDITEL
Nepal, Mero Mobile
Netherlands, KPN NL
Netherlands, Orange NL
Netherlands, T-Mobile NL
Netherlands, Vodafone NL
New Zealand, vodafone NZ
Nigeria, MTN NG
Norway, N NetCom
Norway, N Telenor
Pakistan, Mobilink
Pakistan, Telenor PK
Pakistan, PK-UFONE
Philippines, Globe Telecom
Philippines, SMART
Poland, Era
Poland, Orange PL
Poland, Plus
Portugal, Optimus P

Portugal, TMN P
Portugal, vodafone P
Qatar, Qat-Qtel
Congo Dem. Rep, Vodacom CD
Romania, RO ORANGE
Romania, RO Vodafone
Russia, Beeline RUS
Russia, MegaFon RUS
Russia, MOTIV RUS
Russia, MTS RUS
Russia, NTC RUS
Russia, TELE2 RUS
Russia, Utel RUS
Saudi Arabia, STC
Singapore, SSTARHUB
South Africa, Cell C
South Africa, MTN-SA
South Africa, VodaCom-SA
Spain, vodafone ES
Sri Lanka, SRI DIALOG
Sri Lanka, Mobitel
Sweden, TELIA SE
Sweden, Telenor SE
Switzerland, Sunrise
Switzerland, ORANGE
Switzerland, Swisscom
Taiwan, ChungHwa
Taiwan, FarEasTone
Taiwan, KG Telecom
Thailand, AIS GSM
Thailand, DTAC
United Arab Emirates, ETISALAT
Uganda, MTN
United Kingdom, Orange UK
United Kingdom, T-Mobile UK
United Kingdom, Vodafone UK
United Kingdom, O2 UK
Ukraine, Beeline
Ukraine, Kyivstar
United States, AT&T
United States, T-Mobile
Uruguay, Movisar
Venezuela, Digitel